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Contact for lead author: Area Rangeland Management Specialist, Glasgow Area Office, MT Reference site used? No Date: 05/04/05 MLRA: 52XC Ecological Site: Shale 10-14" p.z. This must be verified based on soils and

climate (see Ecological Site Description). Current plant community *cannot* be used to identify the ecological site.

Indicators. For each indicator, describe the potential for the site. Where possible, (1) use numbers, (2) include expected range of values for above- and below-average years for <u>each</u> community within the reference state, when appropriate & (3) cite data. Continue descriptions on separate sheet.

- 1. Number and extent of rills: Occasional rills would be expected. (Site occurs on 20 to 50% slopes)
- 2. Presence of water flow patterns: Water flow paths will be obvious, regular and continuous with debris dams occurring only on lesser slopes.
- 3. Number and height of erosional pedestals or terracettes: Erosional pedestals present with terracettes present at debris dams.
- 4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are *not* bare ground): Bare ground is 75 to 85%.
- 5. Number of gullies and erosion associated with gullies: Active gullies may be present on steeper slopes.
- 6. Extent of wind scoured, blowouts and/or depositional areas: None.
- 7. Amount of litter movement (describe size and distance expected to travel): Plant litter movement is expected.
- 8. Soil surface (top few mm) resistance to erosion (stability values are averages most sites will show a range of values for both plant canopy and interspaces, if different): Plant cover and litter is at 20% or greater of soil surface. Stability class anticipated to be 3 or greater.
- 9. Soil surface structure and SOM content (include type and strength of structure, and A-horizon color and thickness for both plant canopy and interspaces, if different): Use soil series description for depth and color of A-horizon.
- 10. Effect of plant community composition (relative proportion of different functional groups) & spatial distribution on infiltration & runoff: Sparse plant canopy (10% maximum), slow infiltration rates, and the high amount of bare ground contribute to a naturally high runoff rate even in HCPC.
- 11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site): None.
- **12.** Functional/Structural Groups (list in order of descending dominance by above-ground weight using symbols: >>, >, = to indicate much greater than, greater than, and equal to): Mid stature cool season rhizomatous grasses > shrubs > short stature, warm season rhizomatous grasses > forbs.
- **13.** Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence): Some plant mortality and decadence (10 to 15%) is expected on this site.
- 14. Average percent litter cover (5 to 10%) and depth ((0.0 to 0.25_inches). Litter cover is in contact with soil surface.
- **15.** Expected annual production (this is TOTAL above-ground production, not just forage production): 400 #/acre in 12" p.z., but would expect a 50 pound increase or decrease with each gain or loss of 1 inch average annual precipitation.
- 16. Potential invasive (including noxious) species (native and non-native). List species which characterize degraded states and which, after a threshold is crossed, "can, and often do, continue to increase regardless of the management of the site and may eventually dominate the site": Long leaf sagebrush, slender bush eriogonum, plains prickly pear, broom snakeweed
- 17. Perennial plant reproductive capability: All species are capable of reproducing.

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